



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

### Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

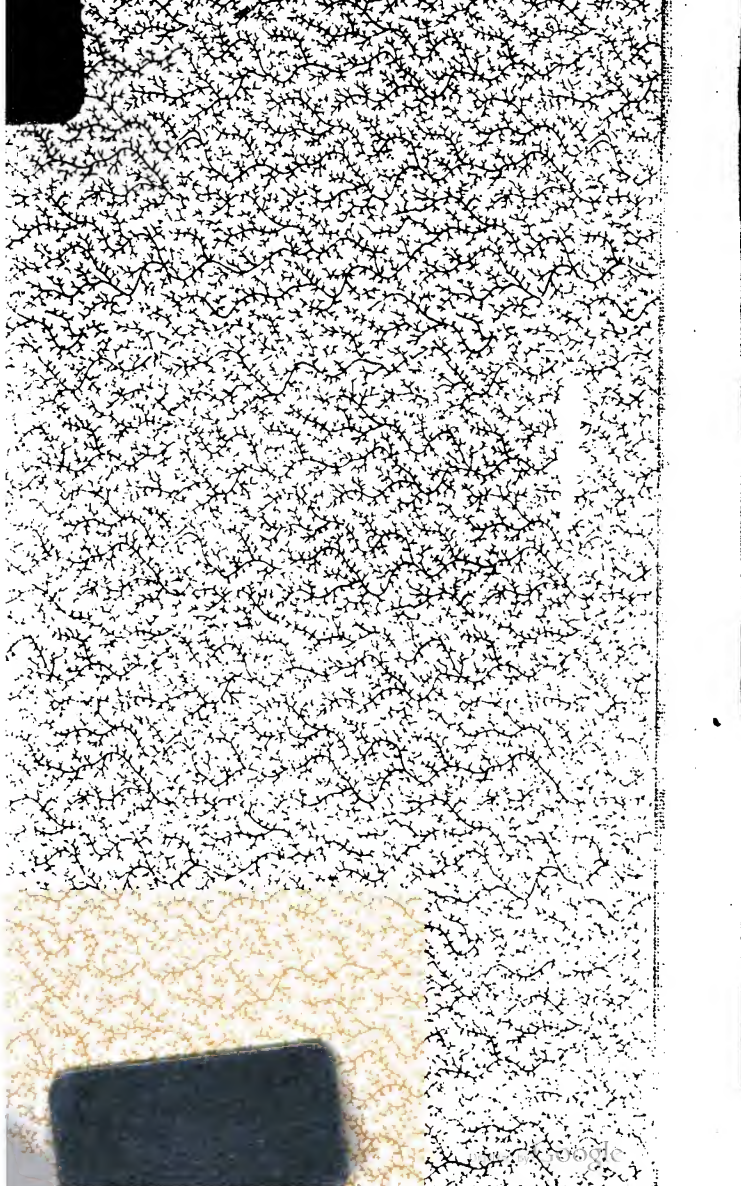
- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

### About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>



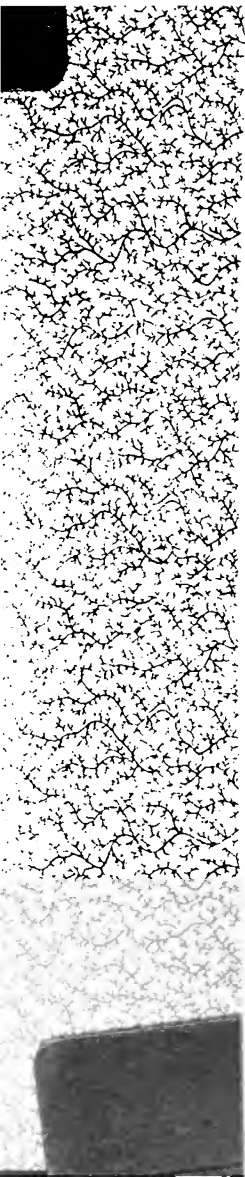
3 3433 06663113 0



Routledge  
MY 111













Routledge  
MYIIM









PRICE SIXPENCE

# FISHING



GEORGE ROUTLEDGE & CO.

# ROUTLEDGES' CHEAP LITERATURE.

Price 1s. each in Fancy Boards, except where specified.

- Wide, Wide World. By MISS WETHERELL. (2s.)
- Nelson (Life of). By JAMES ALLEN.
- Uncle Tom's Cabin. By MRS. STOWE.
- Vicar of Wakefield, and Life of Goldsmith. By WILLMOTT.
- Queechy. By MISS WETHERELL. (2s.)
- Bundle of Crowquills. By CROWQUILL.
- Infidelity, its Cause and Cure. By NELSON.
- The Lamplighter. By CUMMINGS. (2s.)
- Acting Charades. By MISS BOWMAN.
- The Hidden Path. By HARLAND.
- Annui. By EDGEWORTH.
- Hills of the Shatemuc. By MISS WARNER. (1s. 6d.)
- Shakspere's Plays, who Wrote them? By an ENGLISH CRITIC.
- Flood and Field. By MAXWELL. (1s. 6d.)
- The Lucky Penny, &c. By Mrs. S. C. HALL. (2s.)
- Acting Proverbs. By HARWOOD.
- Forest Life in Norway and Sweden. By Rev. H. NEWLAND. (2s.)
- Marvels of Science. By FULLON. With Cuts. (2s.)
- A Lady's Captivity among Chinese Pirates. By FANNY LOUVIOT.
- Eminent Men & Popular Books. Reprinted from the *Times*. (2s.)
- Ballads (illustrated). By AINSWORTH. (2s.)
- A Sailor's Adventures. By GERSTAECKER.
- Christian Names Explained. By NICKLE NICOLA.
- The Pilgrim's Progress. By JOHN BUNYAN.
- Eugenie Grandet. By BALZAC.
- Rifle Volunteers, and How to Drill them. By Captain HANS BUSK. (1s. 6d.)
- Balthazar; or, Science and Love. By BALZAC.
- A Mounted Trooper's Adventures in the Australian Constabulary. By W. BURROWS. (1s. 6d.)
- Echoes from the Backwoods. By Sir R. LEVINGE. (1s. 6d.)
- The Christmas Hamper. By MARK LEMON.
- Biography and Criticism. Reprinted from the *Times*. (2s.)
- Land and Sea Tales. By THE OLD SAILOR. (1s. 6d.)
- The Warlock. By THE OLD SAILOR. (1s. 6d.)

George ROUTLEDGE'S

# HANDBOOK

OF

# FISHING.

NEW YORK

With Illustrations.

1867.

LONDON:

GEORGE ROUTLEDGE AND SONS,

THE BROADWAY, LUDGATE;

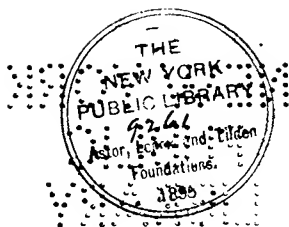
NEW YORK: 418, BROOME STREET.

1867.

*Routledge*

MYI





# CONTENTS.

---

A WORD ABOUT FISH .. .. .	Page 4
ABOUT THE ROD .. .. .	6
CHOOSING THE ROD .. .. .	7
LINES OR BOTTOMS .. .. .	9
SHOOTING THE LINE.. .. .	9
THE FLOAT .. .. .	10
REELS, OR WINCHES, .. .. .	11
REEL LINES .. .. .	12
HOOKS .. .. .	12
HOW TO BAIT A HOOK .. .. .	13
BAITS .. .. .	14
TO BAIT A HOOK WITH GENTILS .. .. .	17
TO BAIT WITH GREAVES .. .. .	17
TO SCOUR AND PRESERVE WORMS .. .. .	18
THE PLUMMET .. .. .	18
PLUMBING THE DEPTH .. .. .	18
LANDING-HOOK AND LANDING-NET .. .. .	19
CLEARING-RING AND LINE .. .. .	20
DRAG-HOOK .. .. .	20
BANK-RUNNER .. .. .	21
LIVE-BAIT KETTLE .. .. .	21
DISGORGER .. .. .	22
RULES FOR ANGLERS .. .. .	22

THE SALMON .. .. .	Page 23
THE TROUT .. .. .	24
THE JACK, OR PIKE.. .. .	26
THE GUDGEON .. .. .	29
THE ROACH .. .. .	30
THE DACE .. .. .	32
THE PERCH .. .. .	33
THE GRAYLING .. .. .	36
THE CHUB .. .. .	37
THE CARP .. .. .	39
THE TENCH .. .. .	40
THE POPE, OR RUFF .. .. .	41
THE BREEM .. .. .	42
THE FLOUNDER .. .. .	43
EELS .. .. .	44
THE STICKLEBACK AND MINNOW .. .. .	45
THE BARBEL .. .. .	46
NATURAL FLY-FISHING, OR DIPPING .. .. .	49
FLY-FISHING AND ARTIFICIAL FLIES .. .. .	50
MATERIALS FOR MAKING FLIES .. .. .	50
WHAT FLIES WILL THE FISH TAKE? .. .. .	59

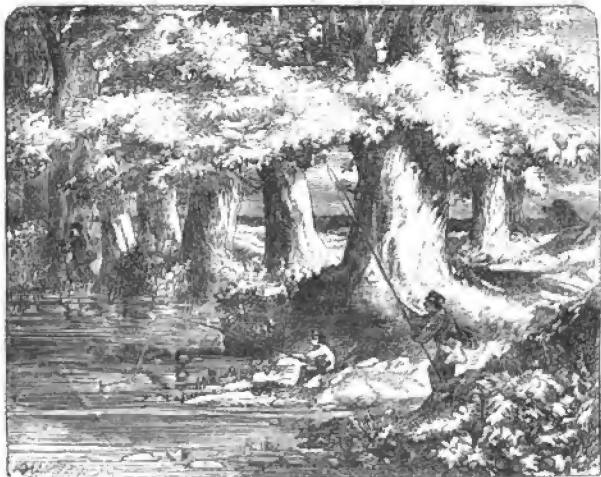


*A Monthly Magazine.*

“Where sticklebacks and minnows  
Each day I caught in store,  
With stone-roaches and miller's thumbs;---  
These brooks afford no more.

“But I a little angler,  
With crooked pin for hook,  
Would shun each noisy wrangler,  
To fish the little brook.”





**W**HAT can be more delightful than angling? Not indeed so much on account of the fish we may catch, but for the pleasantness of the recreation itself, for the cool streams, the shady trees, the little sunny nooks, the tiny or gigantic cascades, the meandering rills, the still pools, "with sedges overhung;" the picturesque mill-wheels, the deep mill-ponds, "smooth sheeted by the flood;" and above all, for the hair-breadth escapes, for the duckings, for the hazards, for the triumphs. Ah, I do not wonder at boys being fond of angling, it is almost an instinct with them, and has long been a favourite amusement with boys of all degrees, ages and constitutions. Therefore we shall be somewhat comprehensive in our notices of this

interesting sport, that every boy who can bait a hook and hold a line may be an angler if he will.

#### A WORD ABOUT FISH.

First, however, let us say a word about fish in general, before we come to fish in particular. Fish or fishes are, to speak scientifically, a class of vertebrated animals (*i.e.*, having a backbone) inhabiting the water; which breathe through the medium of that fluid by means of branchiæ or gills, instead of lungs; which swim by means of fins, and are mostly covered with scales. They are also generally furnished with a white membranous bag close to the backbone, called the air bladder, by the dilatation or compression of which it is supposed they can rise or sink in the water at pleasure. All parts of their bodies seem to aid them in swimming in the water; their fins, their tails, and the undulation of their backbones assist progression, and their whole structure is as much adapted for swimming as that of a bird is for flight.

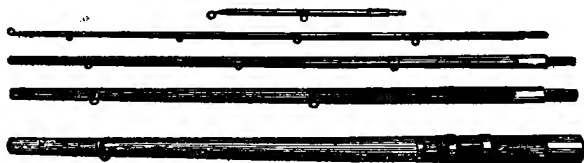
The fins of fish consist of thin elastic membrane, supported by bony rays, and are denominated according to their position—*dorsal* on the back, *pectoral* on the breast, *ventral* near the vent, *anal* that between the vent and the tail, and *caudal* the tail fins. The dorsal and ventral fins appear to balance the fish, and the pectoral to push it forward; while the tail fins are the grand instruments of motion, and enable the creature to dart forward almost as rapidly as the bullet from a gun.

With regard to the senses of fishes, the eye holds the first place ; but this is best adapted for seeing under water. Of the organ of hearing there is no outward sign. The organ of taste is thought to be very unsensitive, and the power of touch but slightly developed. To preserve their own existence, and to transmit it to their posterity, seems to be their only enjoyment ; and they move forward in pursuit of whatever they can swallow, conquer, or enjoy, and their insatiable appetite impels them to encounter every danger, and to their rapacity there seems to be no bound. A single pike has been known to devour a hundred roaches in three days. The fecundity of fish is prodigious. The number of eggs in the codfish often amounts to more than three millions ; those of flounders above a million, of the mackerel 500,000, of the sole 100,000, and of the lobster 20,000 ; but the salmon is far more productive than any of these, as it has been known to have more than twenty millions of eggs !

Without saying any more about "Fish in the abstract," as the angler called his "catch," when he returned without one, we must go to the art of "catching fish ;" and the first thing to be attended to is the necessary fishing apparatus, which may be increased to any extent ; but the *young* angler would be wise to limit his stock as much as possible. I have fished many hundred miles of water, and killed many a thousand of fish, with no better equipment than this :— One rod of about fourteen feet long, with three tops —one stiff top, for bottom fishing and trolling, and



two for fly-fishing. Two reels or winches, one holding a silk and hair line of thirty-five yards in length for fly-fishing, and the other holding a similar line of forty yards, but much stronger, for bottom fishing, trolling, &c. One moderate-sized creel, or fishing-basket. One oblong tin box, about eight inches long, four inches deep, and six inches wide, divided into two compart-



ments at the centre, the lids opening each way, and pierced with holes, which serves to carry dead minnows and ground bait. A landing net; some shoemakers' wax in a piece of soft leather; a large clasp-knife; a pair of sharp-pointed scissors; a pocket-book, the centre filled with leaves of flannel to hold flies, and the remainder fitted up with gut, hooks, silk, baiting needles, a pair of small pliers, split shot, floats, &c.

#### ABOUT THE ROD.

The angle rod is a material article in the young angler's catalogue, and much care should be taken to procure a good one. The fishing-tackle shops keep a great variety, made of bamboo cane, hazel, hickory, and other kinds of wood. Rods are of different lengths, some fitted as walking-canes, and others are

made to pack in canvas bags; the latter are to be preferred, because you may have them of any length, and they are made more true. Those made of bamboo cane are best for angling near towns. But the rods made of the white cane are much superior for fine fishing, particularly for roach, being very light in weight, but stiff.

## CHOOSING THE ROD.

In choosing a rod (not a school rod, for no one likes to choose that), observe that it is perfectly straight, when all the joints are put together, and that it gradually tapers from the butt to the top, and is from twelve to sixteen feet long. A bad rod is likely to snap in striking a heavy fish. Rods fitted with several tops all packing together, are at once the best and most convenient. Some anglers have one rod for trolling, another for barbel, perch, or other heavy fish, as well as those for fly-fishing—which boys may have when they become men—but a thoroughly good rod will suit the juvenile for all purposes. I have now one with which I can fish from a bleak to a pike, by only changing the top and second joints.

A good trolling rod should be made of the choicest stout and well-seasoned bamboo cane, about sixteen feet in length. When trolling with the gorge or live-bait fishing, a long rod is necessary, to enable the angler to drop in his baited hook over high sedges, rushes, &c., as also when the water is bright, for he should then keep as far away from it as he can, which

a long rod enables him to do while dipping, casting, or spinning his bait. If either a jack or pike see him, it is very rare, indeed, that he will take the bait; and again, with a long rod you will be able to drop your baited hook in some very likely place for jack or pike, such as a small hole, division or clear place among a bed of weeds, in a river or any other water where there are many weeds.

There is some difference of opinion among anglers about the number of rings necessary for *trolling rods*: those who have their line on a thumb winder, or on a bank runner, seldom place more than two or three rings on their rod, and others have only one large ring at the top; but if a winch is used, there should be a ring to every joint except the butt,—that is, fasten the winch to the butt about a foot from the bottom, and let that joint be without a ring—each ring made of double twist wire, fixed so as always to stand out, and nearly large enough to admit the top of your little finger; the top joint should have two rings, the top one nearly three times the size of the others; this prevents any obstruction of the line running, which is of material consequence. When not in use, rods should be kept nicely stowed in a moderately dry place, and they ought to be well scraped and re-varnished every three years; should the joints become loose by shrinking, they should be slightly moistened. Should any accident befall a rod while fishing, and should you not have a spare top with you, your only remedy will be to splice your rod. To do this the broken pieces must be cut in a slanting direction, so

as to fit each other, then stuck together by a thin coating of the marine glue, and tightly wrapped round with waxed silk, or very strong yellow hempen twine.

#### LINES OR BOTTOMS.

Next to the rod the line is of the utmost importance. Good lines should be well twisted. The twisted lines should be made wholly of silk, or silk and hair, but those made of gut are the strongest and best for young anglers; the twisted hair are the cheapest, and the single horsehair the finest. The young angler will find a line of about four yards in length the most useful. A single hair line, with a small porcupine float, is commonly used for general fishing; the plaited silk lines are the best for trolling, and are less inclined to break or tangle than the twisted.

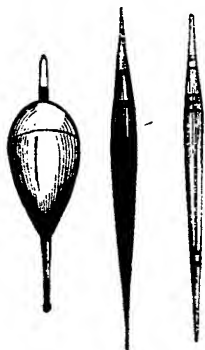
#### SHOTTING THE LINE.

The line must be shotted, that the float may partially sink in the water; and in putting on the shots, place them all together within three inches of the bottom loop of the line; to which loop fix the loop of the hair or gut to which the hook is tied. Place two small shots, the smaller the better, about two inches from the hook, which will cause the bait to swim well and steadily, and the rest above the first loop. When you place shot on the line, do it with a pair of pliers, which is the best and easiest method; some boys fasten them with their teeth, which is a bad and ungentlemanly practice, and they often bite the gut

through, which causes delay and vexation. When you make a line of silk, gut, or hair, remember it must be always finest at the bottom, where the hook is fastened, very gradually increasing in thickness to the top.

#### THE FLOAT.

There are various kinds of floats, each adapted for different kinds of fishing. The principal are : 1. Tip-capped floats ; 2. Cork floats ; 3. Plugged floats. The tip-capped floats are made of several pieces of quills, or of reed for the middle, and ivory or tortoise-shell for the top and bottom, and narrow at each end, gradually increasing in circumference to the middle. They are superior to all others for angling in waters which are not very rapid, particularly in roach fishing, as the least movement or fine bite sinks it below the water. The tip-



capped float is also best for pond fishing for carp and trench, as it requires but few shot to sink it, and consequently disturbs the water but little when cast. The young angler should note that the caps which fix the lines to the float are not rough at the edge, as this roughness chafes and weakens a fine line ; should this be the case, he should smooth them before use.

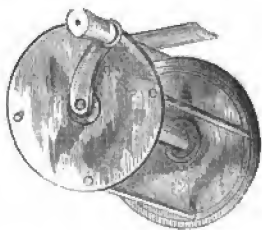
*Cork Floats* are generally made of quills at the top, with a piece of cork, which is burned or bored in the

middle to admit the quill, and then filed or ground down smooth and painted. The bottom is plugged with wood, and has a ring to let the line pass through. Cork floats are well calculated to fish in heavy or rapid streams, as they require a great many shot to sink them, which weight of shot prevents the baited hook from passing too rapidly over the bottom. Cork floats are made of various sizes and forms; instead of common quills, some introduce the quills of the porcupine, which make an excellent strong float.

*Plugged Floats.*—These kind of floats are the cheapest, and made of indifferent quills, some of them of one goose quill with a wooden plug at the bottom, from which they take their name; they are very apt to loosen by the plug coming out. They are often used by the young angler, because they are cheap; but we may say in the words of the ancient Roman “Bad is the best.”

## REELS, OR WINCHES.

A reel, or winch, is a most necessary addition to the rod and line, as it enables you to vary the length of your line at pleasure, and to play your fish. The best winches are those to fix in a groove on the rod, and are fastened with brass ferrules made for the purpose on the butt, because you can fasten such a winch to any sized joint.



There are two kinds of winches, multipliers and plain : the multiplying winch is the most useful, as long as it lasts, but is apt soon to get out of order, unless carefully used and constantly oiled, and care be taken that no sand or gravel is allowed to get into it ; but as young anglers are seldom very careful in such points as these, I would recommend them at first, to purchase a plain and strong winch, which will answer every purpose, and be much less expensive.

#### REEL LINES

Are mostly made of silk and horsehair, twisted or plaited together, but some are made entirely of silk. I prefer, however, a *plaited* silk and hair line, as it is less likely to twist, runs more freely, and is less likely to rot. The length of lines vary from fifteen to eighty yards ; but for general purposes twenty or five-and-twenty yards is quite long enough. The line should always be unwound after a day's fishing, as, if it is allowed to remain wet on the reel, it soon rots.

#### HOOKS.

Hooks are to be bought at the "angling shops," of all sizes, and suitable for the kind of fish to be caught. There is a great controversy among adept anglers about hooks, which is sometimes as violent as those upon politics or religion. Some anglers prefer what are called the Limerick hooks, some the Kendal ; while others again prefer the Kirby or Sneckbend. We are hooked to the Kirby, as we consider those to

be best for holding the fish—a most important particular. The hooks found most suitable for the following fish are these :—

Barbel, 1, 7, 8, 9.  
 Bleak, 11, 12, 13.  
 Bream, 10.  
 Carp, 7, 8, 9.  
 Chub, 8, 9.  
 Dace, 10, 11, 12.  
 Eels, 8.  
 Flounders, 3.  
 Grayling, 10, 12.  
 Gudgeon, 9, 10.

Loaches, 13.  
 Miller's Thumb, 13.  
 Minnow, 13.  
 Perch, 7.  
 Roach, 10, 11, 12.  
 Rudd, 10.  
 Ruffe, 10.  
 Smelt, 9, 10.  
 Tench, 9, 10.  
 Trout, 6, 10.

#### HOW TO BAIT A HOOK.

To bait a hook with a worm, use the following method : First enter the point of the hook close to the top of the worm's head, and carry it carefully down to within a quarter of an inch of its tail ; to do which you must gently squeeze or work up the worm with your left thumb and finger, while with your right you are gradually working the hook downwards. The small lively piece of the worm at the point of the hook moving about will entice the fish ; but mind, if too much of the worm hangs loose, though it may entice fish to nibble, yet they will seldom take the whole in their mouth, so as to enable the angler to hook them ; on the contrary, he is frequently tantalized with a bite, and, when he strikes, finds part of his worm "bolted," the hook "innocent," and the fish "non est." Therefore, to bait a hook well with a worm is necessary to insure hitting a fish when you strike ; and it consists in drawing the worm without injuring it (use him as you would a friend, Walton



says) quite over and up the shank of the hook, leaving only a small lively part of the tail below. If you bait with half a worm, prefer the tail end, and enter the point of the hook into the top part of it, and bring it down nearly to the end of the tail, leaving only a very small piece of it loose. If you bait with two worms on the same hook, draw the first up above the shank, while you put the second on in the same manner as directed with one worm, but enter the hook near the tail of the second worm; then draw the first one down on the second over the shank of the hook, and all will then be well covered, and will be a very *bon-bon* for perch, chub, carp, barbel, and all large fish; but when angling for gudgeon, and other small fish, half a red worm is sufficient, and the tail end is best. If blood-worms are used, put on two or three, in doing which be tender, or you will burst them.

## BAITS.

The principal baits are—

- |                     |                   |
|---------------------|-------------------|
| 1. The Lob-worm.    | 11. Cad-worms.    |
| 2. The Brandling.   | 12. Flag-worms.   |
| 3. The Marsh-worm.  | 13. Grasshoppers. |
| 4. The Tagtail.     | 14. Wasp-grub.    |
| 5. The Ash-grub.    | 15. Beetles.      |
| 6. Cowdung Bait.    | 16. Salmon Spawn. |
| 7. Caterpillars.    | 17. Bread Paste.  |
| 8. Cabbage-worms.   | 18. Cheese Paste. |
| 9. Crab-tree-worms. | 19. Wheat Paste.  |
| 10. Gentils.        | 20. Ground Bait.  |

1. *Lob-worms* are found in gardens or churchyards, late in the evening; they have a red head, a streak

down the back, and a broad tail. This is a good worm for salmon, chub, trout, barbel, eels, and large perch.

2. *Brandling* is found in old dunghills, rotten earth or cowdung, and the best in tanners' bark. It is a good bait for any kind of fish.

3. The *Marsh-worm* is found in marshy grounds, or on the banks of rivers; and is a good bait for trout, perch, gudgeon, grayling, and bream.

4. The *Tagtail* is found in marly lands or meadows, after a shower; and is a good bait for trout when the water is muddy.

5. The *Ash-grub* is found in the bark of trees. It is a good bait for grayling, dace, roach, or chub.

6. *Cowdung-bait* is found under cowdung, from May to Michaelmas; and is a good bait for grayling, dace, roach, or chub.

7. *Caterpillars* can be found on almost every tree or plant. Almost any small caterpillar will answer.

8. The *Cabbage-caterpillar* is found on cabbages.

9. The *Crabtree-worm* can be taken by beating the branches of the crab-apple.

10. *Gentils*. These are bred in putrid liver, or may be obtained from the butchers. They are an excellent bait for all kinds of fish.

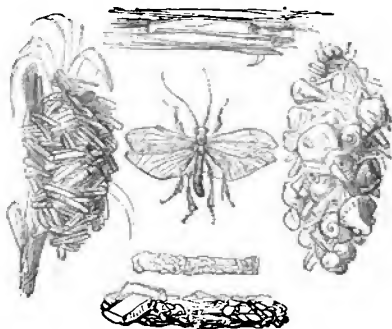
11. *Cad* is found in the ditches, or on the sides of stony brooks. It is an excellent bait for trout, grayling, roach, dace, or chub.

12. *Flag-worms* are found among flags in old pits or ponds, and are good bait for grayling, tench, bream, carp, roach, and dace.

13. *Grasshoppers*, found in sun-burnt grass, and are good bait for various kinds of fish.

14. *Wasp-grubs* are to be obtained from wasps' nests, and are a good bait for most fish that will take gentils.\*

15. *Beetles* are found everywhere, and sometimes in cowdung. They are a capital bait for chub.



THE CADDIS FLY.

16. *Salmon-spawn* is a good bait for trout, chub, and other fish; but must be prepared in a peculiar way before it can be used.

17. *White-bread Paste* is prepared by dipping white bread in honey, and working it in the palm of the hand. It is a good bait for carp, tench, chub, or roach.

18. *Cheese Paste* is made with rotten cheese and

\* Wasp-grubs will keep better and be easier to fit on the hook, if they are baked for half an hour.

bread, worked up in the hand. It is a good bait for chub.

19. *Wheat Paste* is made by bruising wheat and working it with milk, and makes a good ground bait.

20. *Ground Bait* should be used in the spot about to be fished, and, if possible, the night before, and should be fresh. For carp, chub, roach, or dace, use white bread soaked in water, and mixed with bran and pollard. For roach, dace, and bleak, mix clay and bran together in balls the size of a pigeon's egg. For barbel, chandler's greaves, boiled and worked up into a ball with clay. For carp, tench, and eels, malt soaked in water is good; or gentils may be thrown in.

#### TO BAIT A HOOK WITH GENTILS.

To bait a hook with gentils, enter the point of the hook into the gentil near either end, and bring it out at the other end; then draw the point back again just within the gentil, enough to hide it. The best way to bait with a gentil whose skin is somewhat tough, especially in cold weather, is by piercing the skin in the first instance.

#### TO BAIT WITH GREAVES.

First select the whitest pieces from those you have soaked, and put four or five of them upon your hook, or as much as will cover it from the bend to and over the point; these pieces should not be bigger than a pea, and should be put on the hook separately, one after the other—not a large piece doubled, as some

slovenly boys will do, for then the hook is prevented from entering firmly the fish you may strike. These little particulars of baiting are of considerable advantage to young anglers, who ought to remember also that it is a bad practice to soak greaves in hot water, for it makes them rotten, and they in consequence soon fall off the hook.

#### TO SCOUR AND PRESERVE WORMS.

To do this, the young angler should provide himself with a quantity of fresh moss. Wash out all the earth and squeeze it, but not too dry; then put it into a jar and squeeze it tightly down: throw in the worms upon it. The jar should be kept in a cool place in summer, and the moss changed once in three or four days. Gentils should be thrown into a mixture of damp sand and bran to scour them, and will be ready in two or three days.

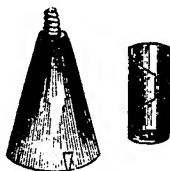
#### THE PLUMMET.

Plummets are used by anglers for sounding the depth of a stream or hole. They are of two kinds, either the folding plummet or the common plummet. The folding plummet, which is the better, is made of a slip of sheet lead, folded up; and this the young angler should never be without.

#### PLUMBING THE DEPTH

Is performed in the following manner: If a folding

plummet, unfold about two inches of it, pass the hook over its side, and then fold the plummet up again: your hook is now secured from drawing away from the plummet. As success depends much in angling at a proper depth, the young angler should take due pains, and measure the depth accurately before he begins fishing. When the plumb-lead touches the bottom, and the top of the float is even with the surface of the water, you will have the true depth.



## LANDING-HOOK AND LANDING-NET.

The landing-hook or gaff is a large hook, which is sometimes barbed like a fish-hook, and sometimes plain, fastened on one end of a rod; this rod is occa-



sionally composed of several pieces, which run one into another, like the slides of a telescope. A landing-net is a small net mounted on an iron ring, which is fastened, like the landing-hook, to the end of a pole.

## CLEARING-RING AND LINE.

The clearing-line is made of several yards of strong small cord, to the end of which is fastened a heavy ring of lead or brass. If the hook should get fast in a heavy weed, post, or anything else, this ring is put over the rod, and suffered to go down to the hook. The rod should be held in the right hand, the top pointing downwards, and the clearing-line in the left, the ring falling on the hook, which, from its weight, generally clears the hook from what it may have struck against. If not, the angler should hold the rod firmly, and draw the line sideways, and break away. In this case, the angler seldom loses more than a hook, if he acts as above directed ; but without the assistance of a clearing-line he frequently loses his float as well as his hook and line, and sometimes breaks his top joint. The brass clearing-rings are to be preferred, because they are jointed, and in consequence can be used when the angler has a winch in his rod, in which case the leaden ring could not be passed over the winch.

## DRAG-HOOK.

The drag is a piece of iron with three or four stout wire hooks without barbs, placed back to back, which is fastened to a strong cord line, which is used to draw away weeds. The landing-hook is, however, infinitely preferable, and not so troublesome. We therefore advise the angler not to use the drag-hook

at all, and merely describe it, that he may know the use of every angling implement.

#### BANK-RUNNER.

The bank-runner is mostly used in the day-time, when the angler is fishing for roach, barbel, &c. It is stuck in the bank, the bottom being strong turned wood, sharpened for the purpose, with a winder at the top for the line, which should be from sixteen to twenty feet long, made of silk trolling-line, thin cord, or plaited Dutch twine. But there should be a cork and bullet to the line, and the bait a dace, which should swim a foot or two from the ground, as it will by the aid of the cork.

When you use the rod, hold the line with your left hand, and with your right pass the forked end under the line, just above the bullet; you may then place the baited hook in the water where you please by a jerk of the rod, at the same time letting the line go from the left hand.

#### LIVE-BAIT KETTLE.

This should be of an oblong form, and not round; white inside, and brown out. In getting out the bait, never put your hand into the water, which frightens the fish, and, by heating the water, makes them sickly and dull; but make use of a small net, which is easily carried in the fish-kettle, by having a piece of the lid cut away in one corner.



## DISGORGER.

This is an instrument with a forked top, about six inches long, made of iron, brass, or bone. Its use is to get the hook from a fish when swallowed; and in using it, the forked end is thrust down upon the swallowed hook with one hand, while the line is held tight with the other, which disgorges the hook, and it is then easily drawn out. In attempting to get a gorged hook from a fish without this instrument, you run a hazard of breaking the hook and hurting yourself. When the fish is hooked through the lip, the angler has only to hold the fish steadily in one hand, while with the other he carefully takes away the hook.

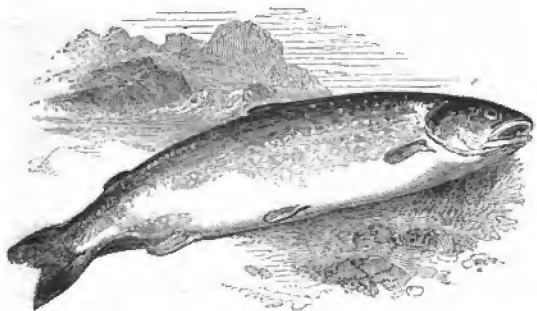
## RULES FOR ANGLERS.

1. Never fish any water without leave from the proprietor, unless it be water that is free to all comers.
2. Never use unfair bait, or attempt to take fish in any but a fair and sportsmanlike manner.
3. Never start on a day's fishing without first considering the wind, weather, and water.
4. Never let your shadow fall on the water.
5. Use the finest tackle of which your fishing will admit.
6. Strike a fish with the *wrist*, not with the arm.
7. Never begin bottom fishing without first plumb-ing the depth.
8. Don't spare ground-bait.
9. Never intrude upon another fisherman's water.
10. Always remember, nothing is lost by politeness.

ACCOUNTS OF THE VARIOUS FRESH-WATER FISH,  
WITH THEIR HABITS, HAUNTS, SEASONS, AND  
THE METHODS OF TAKING THEM.

THE SALMON.

THE Salmon is the king of fresh-water fish. It is handsome in form, its head is small, its nose pointed, its back and sides grey, the belly silvery, and its flesh the well-known salmon-colour. The female



may be distinguished by having a longer snout than the male fish.

Salmon bite best from six till eleven in the forenoon, and from three in the afternoon until sunset, especially when there is a moderate breeze upon the water. The chief months to angle for them are March, April, May, and June. They are to be fished for with lob-

worms or minnows, but a large artificial fly is the most killing bait. The rod should not be less than fifteen feet long, with a good running line, and the reel should contain at least threescore yards. The hook must be large and long in the shank, with a very small one fixed above at nearly the distance of the length of the fish baited with. In fishing for salmon with lob-worms the trolling tackle is to be used, and two of these worms well scoured put upon the hooks.

In the large streams of Scotland, salmon are caught in various ways :—by the stake-net, an artificial space or dyke in a river ; by burning the water, as it is called ; *i. e.* holding a torch above the stream and driving the fish into nets ; also by spearing, which is, however, considered illegal. Few of our young readers will be able to go salmon fishing till they have reached maturity, and, therefore, to give the various modes of attacking the fish would be superfluous.

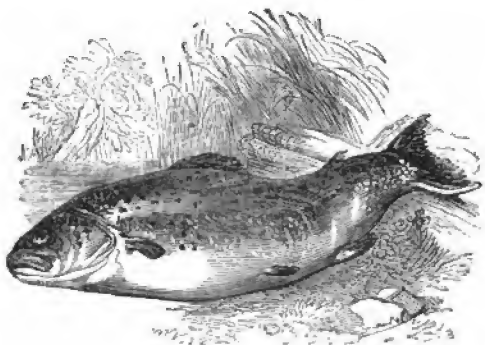
#### THE TROUT.

This beautiful fish is much prized. Izaak Walton says of it, "It is more sharp-sighted than any hawk, and more watchful and timorous than your high-mettled merlin is bold." In its habits it is a very solitary and predaceous fish. Its general length is from twelve to sixteen inches, its weight quite uncertain.

The trout are found in lakes and rivers and minor streams, and are finest in appearance from the end of March to the end of July or middle of August : their

spawning time is from November to January. The most brilliant and beautiful trout are generally found in streams that flow rapidly over rocky bottoms. They feed upon worms, minnows, and other small fish, but their most favourite food is the fly, upon which they thrive and fatten prodigiously.

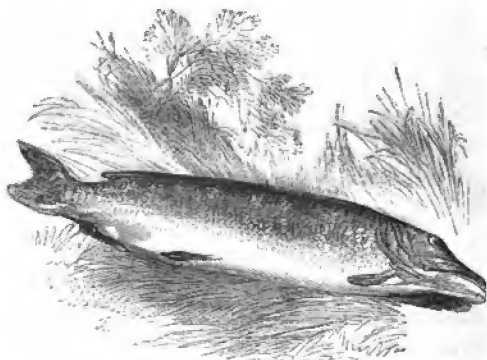
In angling for the trout we must have a stout rod, running tackle, and a cork float ; his bait is the minnow, small frogs, snails, caddis grubs, and artificial flies.



The minnow is, however, the most taking bait, which should be cast lightly on the water, and drawn trippingly against the current. The angler must not be in too great a hurry to strike, as the trout is very apt to nibble at his bait before swallowing it ; rather let him try once or twice and then nick him. The favourite haunts of the trout are mill tails, deep dark holes and eddies, pools, the roots of trees, and the "nethers" of bridges and weirs.

## THE JACK, OR PIKE.

The mighty luce, or pike, says Walton, is taken to be the tyrant, as the salmon is the king, of the fresh waters. His aspect is repulsive. He is a rag ed, savage, ugly-looking fish. His teeth are very sharp and very numerous, being upwards of seven hundred, and his voracious appetite is such that nothing comes amiss to him. He has been known to swallow the plummet, and the clay and bran balls of ground bait of the angler, and he will prey upon "rats and mice and such small deer," with ducks, geese, and even



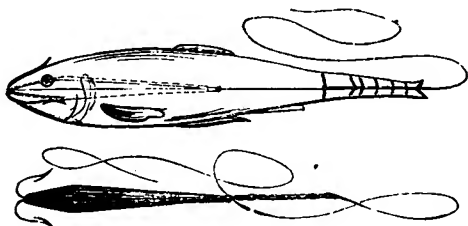
swans, which he has been known to pull under water. He often grows to an enormous size (no wonder), and has been taken upwards of thirty pounds in weight.

Pike are fond of dull, shady, and unfrequented waters, with a sandy, chalky, or clayey bottom. In summer they are found among or near flags, bulrushes, or water docks. They seldom seek a rapid stream,

their favourite retreat being in the vicinity of a whirlpool, or a sharp bend of the stream. In winter they retire into the depths, under clay banks, or under a projecting stone or stump of a tree.

The pike is in its prime during September and October, but is in season from May to February ; the baits used for it, gudgeon, minnows, chub, bleak, and young frogs, and should be about three or four inches in length ; and trolling for them is "excellent sport." The rod should be strong ; the line of silk, at least thirty yards long, wound upon the winch already described. Hooks for trolling, called dead gorges, and other sorts for trolling, snap and trimmer, and baiting-needles, are to be bought at every shop where fishing tackle is sold ; in the choice of the first, let them not be too large, nor their temper injured by the lead on the shanks, nor the points stand too proud ; and although usually sold on wire, it is recommended to cut off the wire about an inch from the lead, and with a double silk well waxed fasten about a foot of good gimp to the wire, with a noose at the other end of the gimp large enough to admit the bait to pass through to hang it upon the line. The best baits are gudgeon and dace of a middling size ; put the baiting-needle in at the mouth and out at the middle of the tail, drawing the gimp and hook after it, fixing the point of the hook near the eye of the fish ; tie the tail to the gimp, which will not only keep it in a proper position, but prevent the tail from catching against the weeds and roots in the water ; thus baited, the hook is to be fastened to the line and dropped gently in the water

near the sides of the river, across the water, or where it is likely pike resort ; keep the bait in constant motion, sometimes letting it sink near the bottom and gradually raising it. When the bait is taken, let the pike have what line he chooses. It will be soon known



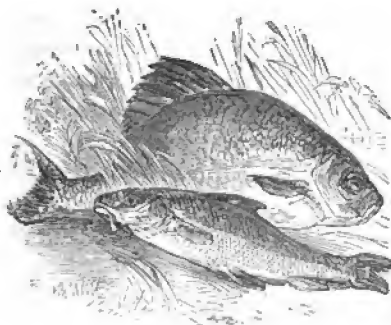
when he has reached his hole, which he always flies to, by his not drawing more. Allow him ten minutes for gorging the bait, wind up the line gently till you think it is nearly at its stretch, and then strike. Manage him with a gentle hand, keeping him, however, from roots and stumps, which he will try to fasten the line upon. In clear water veer out line till he is sufficiently tired, and a landing net can be used ; but by no means, however apparently exhausted he may be, attempt to lift him out with the rod and line only, for the moment he quits the water he will open his mouth, and from his own weight tear the hook from his stomach, and he will be lost.

In trolling, the bait hook should never be thrown too far ; in small rivers the opposite bank may be fished with ease, though the violence of its falls upon the water in long throws soon spoils the bait by rubbing off its scales. The lead hook is used by putting

the lead into the mouth of the live bait, and sewing it up; the fish will live some time, and, notwithstanding the lead, will continue to swim. In angling for this fish always prefer a rough wind, and when the stream is clear for trolling. Pike never bite in white water after rain, &c. If a pike goes slowly up a stream, after taking the bait, it is said to be the sign of a good fish.

#### THE GUDGEON

Is one of the most delicious fish for eating, although small in size. It bites freely from the latter end of spring until autumn, in gloomy warm days, from an



GUDGEON AND BREEM.

hour after sunrise to within the same space of its setting; and during the rest of the year, in the middle of the day, when it is warmest.

In angling for gudgeon the tackle must be very fine, a single hair or fine gut line, a hook, No. 8 or 9, a



short rod and line, and a small porcupine float. They will take the small red-worm greedily, and blood-worms—the first is perhaps the best—and a rake or the boat-hook should be kept frequently stirring the bottom. To the spot so stirred gudgeon assemble in shoals, expecting food from the discolouring of the water; and by now and then throwing in a handful of gravel mixed with dead gentils, they are also kept together, and sometimes great quantities are taken. They are apt to nibble at the bait; the angler ought not, therefore, to strike at the first biting.

Should any young angler desire a good day's fishing for gudgeon, and a pleasant walk into the bargain, he should seek out some sequestered gravelly stream, and providing himself with a rake, he may have sport till he is tired of it. He will find them scattered up and down every river in the shallows during the heat of summer, but in winter they get into deeper water, and are to be fished for there with your hook always touching the ground, if fished for with a float. Some persons, however, prefer fishing for them with a running line upon the ground without a cork, but this requires a gentle rod and a gentle hand.

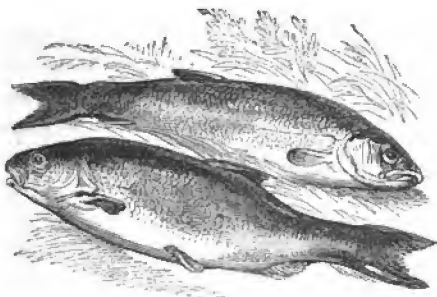
#### THE ROACH.

The roach is a handsome fish either in or out of the water. It inhabits many of our deep still rivers, delighting most in quiet waters. It is gregarious, keeping in large shoals. It delights in gravelly, sandy, or a kind of slimy marl bottom, under a deep

gentle running stream ; in summer they often frequent shallows near the tails of fords, lie under banks among weeds, under the shades of boughs, and at or opposite the mouth of a rivulet or brook, that empties itself into a large river. In winter they like to get into clear, deep, and still waters.

The tackle for roach must be fine and strong, a six-foot rod and a five-foot line, a porcupine float, and hooks No. 11 or 12. The bait, gentils, red paste, boiled wheat or malt. The ground bait should be boiled malt or bran mixed with clay, in which are a few dead gentils. In fishing for roach in ponds, chew and throw in white bread, baiting with one large gentil. The hook should be No. 6, and the bait either touch the bottom or lie within one inch of it.

The season for roach fishing in the Thames begins



ROACH AND DACE.

about the latter end of August and continues through the winter. To London Bridge and among the shipping below it, numbers of roach return in June

and July, after having been up the river to spawn, and many of them are taken by means of a strong cord, to which is fastened a leaden weight, more or less, according to the strength of the current ; a foot above this lead a twine twelve feet long is joined to the cord, and to this twine at convenient distances are tied a dozen hair links, with roach hooks at the ends ; these are baited with white snails or periwinkles, the fisherman holds the cord in his hand, and easily feels the biting of the fish, which is a signal to pull up, and frequently five or six are taken at a haul.

#### THE DACE.

Dace are gregarious—are great breeders—very lively—and during summer fond of playing near the surface. Their haunts are deep water, near the piles of bridges, where the stream is gentle, and has a sandy or clayey bottom. They like deep holes that are shaded by water-lily leaves, and under the foam caused by an eddy ; in the warm months they are to be found in shoals on the shallows near to streams.

The baits for dace are the red worms, brandling, cowdung, and earth bob, and, indeed, any worm bred on trees and bushes, and almost every kind of fly and caterpillar not too large. In angling for dace, with worms, maggots, &c., the tackle cannot be too fine, the float small, the hook No. 9, the shot a foot from it ; by baiting the place with a few maggots before fishing, the diversion will be increased. If you angle in an eddy between two mills-treams, and the water is

only two or three feet deep, there will be a greater chance of success than where it is deeper ; take a cork float, bait with three large gentils, and strike at the first nibble. If there are large dace in the mill pool they will resort to this eddy.

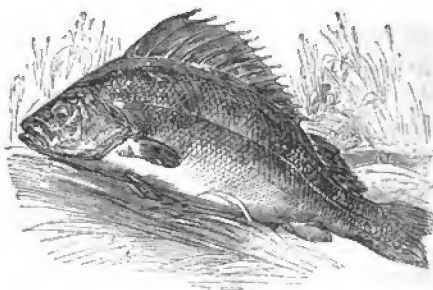
In bottom fishing for dace, let the ground bait be bread soaked an hour in water ; put an equal quantity of bran, knead it to a tough consistence, and make it into balls, with a small pebble in the middle, to sink them ; throw these balls a little up the stream from the spot where it is proposed to angle, that the current may not drive them beyond the reach of the line. Fish for dace within three inches of the ground, especially where the ant fly is the bait under water. We have more than once caught dace upwards of a pound in weight upon night-lines baited with minnow for eels. In fishing take advantage if you can of a still, warm, gloomy day, or go in a summer's evening to the smooth part of the end of a mill-stream from seven to eight, and as long as the light continues the dace will yield diversion.

## THE PERCH.

“Perch feed on perch,” is an old maxim ; the perch being the only one of all fresh-water fish that feeds on its own kind. His excuse is a prodigious appetite, like that of Saturn, who ate his own offspring. Notwithstanding this wicked propensity, the perch is a beautiful fish, the back and part of the sides being a deep green, marked with broad black bars, pointing

downwards ; the spaces between are golden, the belly white, tinged with red, and the ventral fins tinged with scarlet. They vary greatly in size. The largest perch we ever caught weighed three pounds twelve ounces, and was taken with a roach bait near Richmond. Their general length is about ten or twelve inches.

Perch are found in clear swift rivers with pebbly, clayey, or sandy bottoms. They are fond of water moderately deep, and frequent holes near to gentle streams where there is an eddy, the hollows under banks, among weeds and roots of trees, piles of bridges, or in ponds which are fed by a brook or rivulet. The perch is a bold biter in the summer, but scarcely ever



in the winter. In the middle of a warm sunshiny day, you are sure to have him with a proper bait. He bites best in the latter part of the spring, from seven till eleven in the forenoon, and from two to six in the afternoon, except in hot and very bright weather ; and then from sunrise to six in the morning, and in the evening from six till sunset.

The baits for the perch are various, as well as the

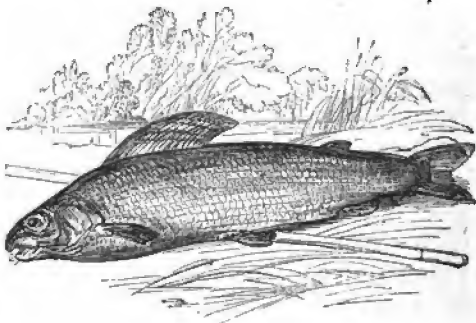
manner of using them. Of worms, the best are small lob-worms, which have no knot ; brandlings, and red dunghills, or those found in rotten tan, all well scoured. The hook may be varied from 2 to 6, being well whipped to a strong silkworm gut, with a shot or two a foot from it. Put the point of the hook in at the head of the worm, out again a little lower than the middle, pushing it above the shank of the hook upon the gut ; take a smaller one, beginning the same way, and bring its head up to the middle of the shank only ; then draw the first worm down to the head of the latter, so that the coils may hang one above the other, keeping the point of the hook well covered. This is the most enticing method that can be adopted in worm-fishing. Use a small cork float to keep the bait at six or twelve inches from the bottom, or sometimes about midwater ; in angling near the bottom, raise the bait **very** frequently from thence almost to the surface, letting it gradually fall again. Should a good shoal be met with, they are so greedy that they may be all caught, unless one escapes that has felt the hook ; then all is over, the fish that has been hooked becomes restless, and, somehow or other, the whole shoal leave the place.

Other baits for the perch are, roach, sticklebacks with the spines cut off, miller's-thumbs, horsebeans boiled, cadbait, lobs, and gentils ; but the best and most enticing bait is a live minnow. To draw the fish together, three or four balls of stiff clay should be procured, and holes made in them ; one end of a lob-worm should be put into each hole, and the clay closed

fast upon them, and these, a yard or two apart, thrown into the angling place. If you find the fish shy, try not long in one spot. In baiting your hook with the minnow, fix your hook through his back fin, and use a small reel with your rod. Your hook should be No. 5, fastened to a link of gimp.

#### THE GRAYLING.

The grayling is a fish of elegant form ; the back is of a dusky green, inclining to blue ; the sides of a fine silvery grey (from which the fish derives its name), marked with black spots, irregularly placed ; and



when first taken, this fish seems to glitter with spangles of gold. It is rather a hog-backed fish ; and, from the nose and belly touching the ground together, is supposed to feed mostly at the bottom. In length it seldom exceeds sixteen inches, but some have been caught upwards of five pounds in weight.

The haunts of the grayling are in rapid, clear streams, particularly such as flow through mountainous

countries.\* They are usually taken in the same manner as the trout, and with similar baits. They do not bite freely till late in August or early in September, and may be found at the tails of sharp streams and in deep water. They rise more boldly than the trout, and if missed several times will still pursue the bait. They will bite during the whole of the cold cloudy days ; but the preferable time to look after them is between eight and twelve o'clock in the morning, and from four in the afternoon till after sunset. Grasshoppers, wasp-grubs, maggots, brandling-worms, and the artificial fly, are the most killing baits.

## THE CHUB.

This fish takes its name from the shape of the head, not only in our own, but in other languages. He much resembles the carp, but is of a larger form ; the head and back are of a deep dusky green ; the sides silvery, but in the summer yellow. The tail is forked, and of a brownish hue ; and altogether the chub is rather a handsome fish, although its flesh is not in much esteem.

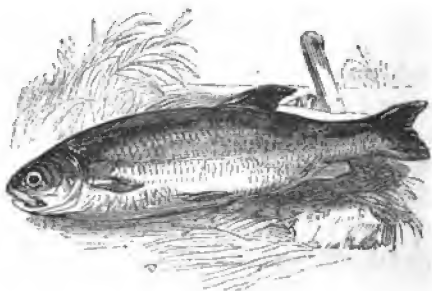
The haunts of the chub are in rivers whose bottoms are of sand or clay, or which flow over a rocky bottom, in deep holes, under hollow banks ; in summer particularly, where, shaded by trees, weeds, &c., they frequently float on the surface, and are sometimes found in streams and deep waters, where the currents are strong. In ponds fed by a rivulet they grow to a large size.

\* I have taken tolerably large graylings in the little brooks that flow into the Dove, in Derbyshire.—ED.



To fish for chub, you should have a stout long rod, a strong line (and if you use a reel, you will be the better able to fish under bushes), with a yard or more of the best silkworm gut at bottom ; a hook proportionate to the bait used ; a swan-quill float, and the line so shotted, eight or ten inches from the hook, as to sink the float to a quarter of an inch above the surface. The same groundbait is to be used as for carp, and the hook backed with a sufficient quantity of salmon's roe to fill the bend properly : this, rightly managed, is a tempting bait.

By daybreak the young angler should be at the



river ; and, after baiting his hook with a cockchafer let him move it two or three times near the surface, as in the act of flying ; then let him drop it in the water, tapping the rod gently, which will cause the appearance of its struggling to escape. This attracts the chub, who are so fond of this bait, that they will rise two or three at a time to seize it. But mind and be ready with your landing-net.

The chub will take a grub, wasps, maggots, paste of fine new bread worked in the hand, and tinged with vermilion, to make it look like salmon-roë; but the best bait for bottom or float-fishing for the chub is old Cheshire cheese, worked with the crumb of a new roll, or the pith from the backbone of an ox. In baiting with the cheese, put a round lump the size of a cherry on a large hook, so as to cover the bend, and some way up the shank; fish six inches from the bottom, or in cold weather the bait may lie on the ground. When there is a bite, the float will be drawn under water: strike immediately, and give him play, holding a tolerably tight line, to keep the fish clear from weeds and stumps.

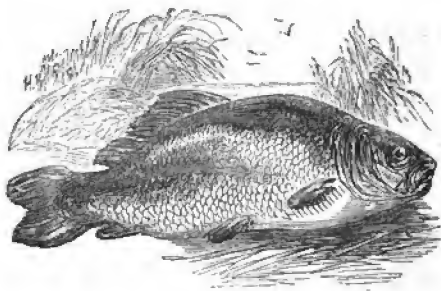
The best time for fishing for chub is chiefly before sunrise to nine in the morning, and from four till after sunset in the summer; but, in winter, the middle of the day is best. In hot weather, the chub is to be fished for at or near the top of the water, and not deeper than midwater; and in cold weather, close to or near the bottom; and the main point on taking the fish is for the angler to keep himself out of sight.

## THE CARP.

Carp are esteemed among the richest fresh-water fish we have in the kingdom, and are as cunning as foxes. The angler, therefore, must be "wide-awake" to catch him, and also as patient as a saint. He may, however, fish for him at any time in the day during warm weather. The bait may be either worms or

paste. Of worms, the bluish marsh or meadow is the best ; but a red-worm, not too big, will do, or a large gentil : of paste, the best is made of bread and honey ; and the spot intended should be well baited beforehand. In a large pond, to draw them together, throw in either grains, or blood mixed with cowdung, or bran, or any kind of garbage ; follow this with some of the small baits you intend to angle with.

If you fish for carp with gentils, put on your hook a small piece of scarlet cloth, about the bigness of a



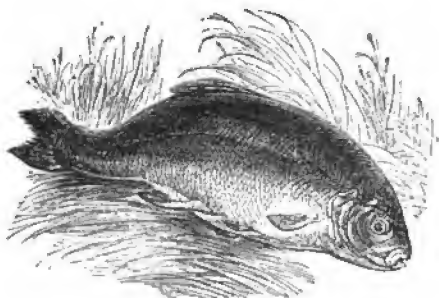
pea, soaked with oil-of-peter (by some called oil-of-the-rock), and keep your gentils for two or three days in a box smeared with honey ; and while you are fishing, chew a little bread, and throw it in about the place where your float swims. In this way, with due patience, you will prove a match for these crafty fish.

#### THE TENCH.

The tench is one of our most useful fresh-water fishes, for the ease with which it may be preserved and

its increase promoted, and the goodness of its flesh. It is very usual to breed it in ponds, but naturally, like many others of the carp tribe, it is generally found in lakes and still waters ; its favourite haunts are in places well shaded with bushes or rushes. In standing waters, it lies under weeds, near sluices, and at pond-heads.

To fish for tench, make up some paste of brown bread and honey ; and you may use a marsh-worm, but he will

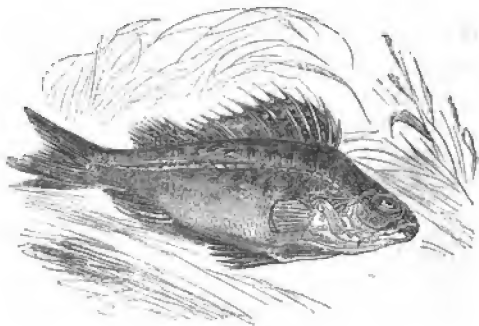


take the bread in preference, particularly if you add to it a little tar. He will also take a small red-worm, the head nipped off, and a cad-worm put on the hook first ; but he will only feed in the three hot months. He will likewise bite at a lob-worm, or a green gentil ; but the pastes are by far the most killing baits.

#### THE POPE, OR RUFF,

Is something like a perch in shape, but more bluff and bulky. He is found principally in slow, deep, quiet rivers, which have a loamy bottom. The spawning

time is in April. The best baits for him are red-worms and brandlings. The places where he is to be had are where the water is deep and still ; and these places should be baited with some clay-balls, with which worms are mixed. Should the water be muddy, worms will do alone ; but if clear, clay must be used to render it opaque before you fish. The fish will



bite at any time of a warm summer's day, when the sky is cloudy. In angling use a No. 8 or 9 hook, with a quill float ; and the moment you feel a bite, strike, without allowing much line.

#### THE BREEM.

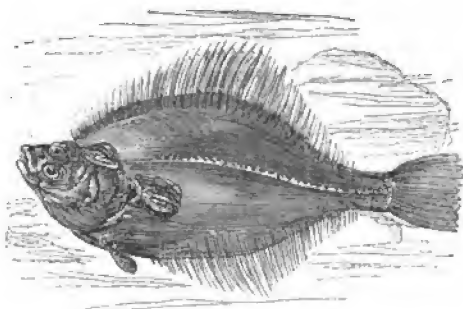
The bream, at full growth, is a large and stately fish, and is oftentimes as fat as a hog. He is principally found in large ponds or in lakes, and in still rivers where the waters are deep and shaded by weeds ; and may be taken in summer from May to the end of September ; and in these months from sunrise

to eight o'clock in the morning, and from five o'clock till twilight in the evening.

The baits are many : paste made of brown bread and honey, gentils, wasp-grubs, flag-worms, and brandlings. Use lob-worms, cut in pieces, and grains as groundbaits in the places where you intend to angle. Use a gut line, quill float, and No. 10 hook. Sound the bottom, which should be eight or ten feet deep, and stand at least two yards from the bank from which you fish. Strike as soon as you feel a bite.

#### THE FLOUNDER.

The flounder is a well-known flat-fish very common about our own coasts ; and should any of our young

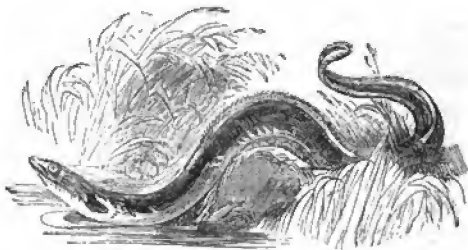


friends be at the seaside, it is well that they should know how to take flounder. They are also found in rivers, at some distance from the sea. They may be taken in May, July, and August,—not in June, as that is their spawning time. The best baits are red-

worms and marsh-worms, on a No. 6 hook ; and you should fish at the bottom, trailing the bait gently along.

#### EELS.

Eels are denizens of the mud ; but they are fond of clean, not foul mud, and ought never to be sought after in filthy places. There are many modes of taking them : by rod and line, by dead line, by sniggling, by



bobbing, and by spearing. When a rod is used, you should put a maggot or red-worm on a No. 8 hook ; the bait should touch the bottom ; and, when you have a "bite," the float should be drawn quite under water before you strike.

The dead line is a line of whipcord, with hooks about six inches asunder, baited with lob-worms or small fish. You should also have a bank-runner—a reel on a pin or stake stuck into the ground on the edge of the bank ; the line and baits should be thrown

in, and left for the eels to *amuse themselves* with,—looked to, and drawn up at *your leisure*.

In sniggling, a lob-worm is put upon a stout worsted needle ; the line is on a winder ; and the fish will be found near flood gates, wharfings, bridges, piles, holes in the banks of rivers, ponds, and canals. The bait should be put into the lurking-places of the eel, by means of a stick with a forked head ; and when the bait is taken, which will easily be known by the pull of the string, strike.

*Bobbing for eels.*—In this process long red-worms are strung on threads of worsted, until a bunch as large as the two fists is formed around a piece of lead. The whole is sunk to the bottom, or nearly so, then raised a little, then depressed, so as to induce the eels to bite. When this occurs, heave up without hurry. The number of eels taken in this way is often prodigious.

In spearing eels, the spearer usually goes into the mud in a pair of pants or mud pattens, pieces of square board fastened into the heel to prevent sinking. He takes an eel-spear in his hand, something like Neptune's trident, and progs the mud all under (not all over), and the eels are caught between the forked blades of the spear. Great numbers of eels are taken in this way on the muddy ooze of salt or fresh-water rivers.



#### THE STICKLEBACK AND MINNOW.

The stickleback is a dark-coloured little fish, found in ditches and ponds. They are best caught with a



small hand-net, and are used as bait for perch. The minnow is very beautiful in appearance, being of a rose colour underneath, and may be taken with a worm



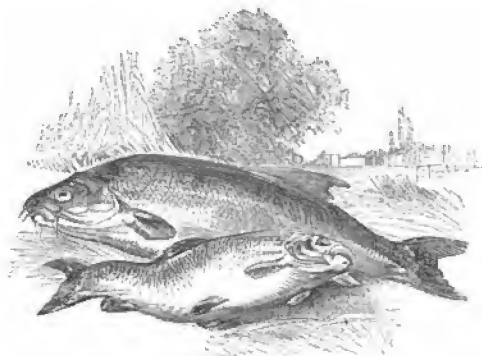
and a No. 13 hook at any time of day ; but more easily with a small hand-net. They are commonly found in little rivulets, rills, or small sandy streams, and are highly prized by the angler as baits for many kinds of fish.

#### THE BARBEL.

The barbel is a bold, sturdy, handsome-looking fish, although its flesh is coarse to the eater ; but he is a rare fellow for sport, and often affords great amusement as well as chagrin to the angler by his bolting off with the line by a "coup de barbel," and breaking it with his tail. Izaak Walton says, that barbel "flock together like sheep."

Barbel are to be found in the strongest runs of water. In summer, they love the shallowest and sharpest streams, and will lurk under weeds, and will root and dig in the sand like pigs. Sometimes he retires to deep and swift bridges, or to flood-gates or weirs, and will rest himself against piles or hollow places. In winter, he gets into deep water.

In fishing for barbel in large streams, you should go



BARBEL WITH GOLD CARP.

out in a boat provided with greaves, gentils, and red-worms; and, before you begin fishing, you should throw in plenty of groundbait—such as soaked greaves, bran and clay made into small balls, maggots, and a paste made of sheep's suet, cheese, and honey compounded together. They may be angled for with a stout rod, strong running-line, cork float, and No. 7 or 8 hook, baited with marsh-worms or greaves. The

barbel being a sharp biter, strike the moment you feel a nibble. He may be caught from May to October all day, but best in the morning and evening. After he is struck he will frequently make a run, but you must play him gently ; keep him clear of weeds, and try to get him into deep water ; in hauling him to land mind what you are about, or you will be sure to lose him ; and when you have him, mind he does not bounce out of your hand and drop down the stream again.

## NATURAL FLY-FISHING, OR DIPPING.

**F**ISHING with a fly may be practised either with the natural fly, usually called "dipping," or with the artificial fly; in which latter case the sport is called "fly-fishing," or sometimes "whipping." Dipping requires a moderately long and *stiff* rod, of about twelve or thirteen feet. The line should not be above a yard in length from the end of the rod, but the reel should contain sufficient to play the fish if necessary. When the river is much overhung with bushes, it is a good plan to wind the line round the end of the top joint, leaving only a few inches dependent; and then having thrust the rod through some small opening in the bushes, gradually to unwind the line by turning the rod in the hand, so as to drop the fly on the water in the most gentle manner. In this insidious way large fish are often taken with any of the flies which are in season and found at the time on the banks of the river which is fished, especially if they are only just coming out, and the fish are not yet satiated with them. It is quite needless to give a list of the natural flies which are likely to prove serviceable to the fisherman, because he has only to look for those which *at the time* are tempting the fish, and then to find them on the banks, and at once to try their

19. *Stone fly*.—Wings of a dusky-blue cock's hackle, or a mottled feather from a hen pheasant, the body of dark-brown and yellow camlet mixed, and a grizzled hackle for legs; the wings should be flat.

20. *Black silver palmer*.—The body of black ostrich harl, ribbed with silver twist, and wrapped with black cock's hackle.

21. *Willow fly*.—The wings of dark grizzled cock's hackle, the body of blue squirrel's fur, mixed with yellow mohair.

22. *Yellow palmer*.—The wings of white hackle, dyed yellow, the body of yellow silk.

23. *Black palmer*.—The body of black ostrich's harl, wrapped with a black cock's hackle.

24. *Black palmer, ribbed with gold*.—The body of peacock's harl, wrapped with a black cock's hackle, and ribbed with gold twist.

25. *Marlow Buzz or Cock-a-Boundhu*.—This is one of the most killing flies known, and should never be off the line during the trout season. The body of peacock's harl, ribbed with gold twist and a dark-red cock's hackle over all.

26. *The Grouse Hackle*.—This is also a very killing fly, especially late in the evening, during June, July, and August. Body of brown fur, ribbed with gold twist, and a grouse hackle over all; hook No. 10.

The foregoing list comprises twenty-six of the most killing flies, and the following are the months in which they will be found to kill best.

*February*, red cowdung fly, blue dun; *March*, brown; *April*, black gnat, stone fly, gravel or spider

fly, the green tail, March brown, blue dun ; *May*, green drake, grey drake, oak fly, hazel fly, little iron blue, and yellow sally ; *June*, hare's ear, cock-tail, whirling dun, marlow buzz, bee fly, kingdom fly, white gnat, blue gnat, blue dun, governor, fern fly, gold spinner ; *July*, red ant, red spinner, yellow dun, coachman, fern fly ; *August*, whirling blue, red spinner, pale yellow dun ; *September*, willow fly, silver twisted blue, whirling blue.

It would of course be impossible, in a work of this description, to give a list of all the artificial flies used by experienced fishermen, but the above are a few of the most killing. For bleak, dace, roach, chub, &c., a piece of a maggot, or a small piece of white leather, should be placed at the end of the hook.

Having thus given the "order of flies," natural and artificial, we may imagine the young fly-fisher, with rod in hand, proportionate to his strength and the breadth of the stream, ready to throw his fly ; but let his rod and running tackle be in good order, and the idea of the coachman's whip out of his mind. He is not to flog the water, but to tickle it. The novice should teach himself to handle the line, by beginning with it alone (*i. e.* without flies or hook), trying a short length first, and lengthening it gradually. In using the rod, it should be drawn gently back without force, and thrown forward again when the line has reached its full extent behind him. Take care in doing this, that the fly be not whipped off. When tolerably expert, put on one fly, and try awhile with

that, adopting two or three when able to use them properly.

In fly-fishing keep as far from the water as possible, especially if fishing for trout. Let only the fly touch the water, and keep moving it gently and slowly on the surface. When a fish rises, let a moment elapse before you strike, and then do it sharply. If your tackle be sufficiently strong, take your fish out at once; but, if fishing from a bridge or high bank, it may be necessary to play him.

When you have two flies on your line, you must try to throw your line so that the bottom fly shall reach the water first; it must be done always as lightly as possible, so that it may resemble a natural fly settling upon the water. You must suffer the line to float gently down the stream, at the same time dragging along towards you to the left hand.

The best time for angling with the fly is when there is a gentle breeze upon the water; south and west winds are to be preferred, when the water has been disturbed by heavy rains and is just resuming its natural colour, or when the day is dull and cloudy after a moonlight night. The best time, morning and evening. In cold weather the fish bite deeper, and you should then let the fly sink a little. Take care to have the wind in your back, and the sun in your face, if possible.

When you see a rise, throw your fly about half a yard above the fish's nose, and let it fall down with the stream; watch it narrowly, and strike as the fish rises, giving him an "infinite little moment" to taste.

When you have hooked, play your fish carefully, keeping up his head and running him down the stream, at the same time driving him towards you. If you see a fish rise at a natural fly, throw your bait a little before him, so that he may take it as "one of the number."

To know what flies the fish are most likely to take, observe what natural flies are about the water, or on the grass, trees, or bushes in the vicinity of the river; and take that fly which is the most in abundance, either natural or artificial, at your discretion.

Such are, my young friends, a few practical particulars concerning angling and fly-fishing, sufficient to enable any young angler to begin. For more abundant information, we refer him to old Izaak Walton, Stoddart, Ephéméra, and Salter; our parting advice is to him, never to forget humanity, and to inflict as little pain and torture upon God's creatures as possible.





**ROUTLEDGE'S**  
**SIXPENNY HANDBOOKS.**  
**WITH ILLUSTRATIONS.**

---

*List of the Series.*

1. SWIMMING AND SKATING.
2. GYMNASTICS.
3. CHESS, WITH DIAGRAMS.
4. WHIST.
5. BILLIARDS AND BAGATELLE.
6. DRAUGHTS AND BACKGAMMON.
7. CRICKET.
8. THE CARD-PLAYER.
9. ROWING AND SAILING.
10. RIDING AND DRIVING.
11. ARCHERY, FENCING, AND BROADSWORD.
12. CONUNDRUMS.
13. MANLY EXERCISES: BOXING, RUNNING,  
TRAINING, ETC.
15. CROQUET, WITH ILLUSTRATIONS, DIAGRAMS, ETC.
16. FISHING.
17. CONJURING.
18. BALL GAMES.

## BOOKS FOR THE COUNTRY,

In Foolsap 8vo, Fancy Cloth Covers, with numerous Illustrations.

Price One Shilling each (unless specified).

1. **ANGLING**, and **WHERE to GO**. By **ROBERT BLAKY**.
2. **PIGEONS** and **RABBITS**. By **E. S. DELAMER**.
3. **SHOOTING**, in all its Varieties. By **ROBERT BLAKY**.
4. **SHEEP**, their Diseases and Management. By **W. C. L. MARTIN**.
5. **FLAX** and **HEMP**, its Culture and Manipulation.
6. **THE POULTRY YARD**. Edited and revised by **E. WATTS**.
7. **THE PIG**; How to Choose, Breed, Feed, Cut-up, and Cure.
8. **CATTLE**. By **MARTIN** and **RAYNBIRD**. (1s. 6d.)
10. **THE HORSE**; its History, Management, and Treatment.
11. **BEEES**; their Habits, Management, and Treatment.
12. **CAGE** and **SINGING BIRDS**. By **H. G. ADAMS**.
13. **SMALL FARMS**; their Management. By **MARTIN DOYLE**.
14. **THE KITCHEN GARDEN**. By **E. S. DELAMER**.
15. **THE FLOWER GARDEN**. By **E. S. DELAMER**.
16. **RURAL ECONOMY**. By **MARTIN DOYLE**.
17. **FARM** and **GARDEN PRODUCE**. By **MARTIN DOYLE**.
18. **COMMON OBJECTS** of the **SEA-SHORE**. By **WOOD**. With Coloured Illustrations.
19. **COMMON OBJECTS** of the **COUNTRY**. By **WOOD**. With Coloured Illustrations.
20. **AGRICULTURAL CHEMISTRY**. By **ALFRED SIBSON**.
21. **OUR WOODLANDS**, **HEATHS**, and **HEDGES**.
22. **BRITISH FERNS**. By **THOMAS MOORE**, F.L.S.
23. **FAVOURITE FLOWERS**: How to Grow Them.
24. **BRITISH BUTTERFLIES**. By **W. S. COLEMAN**.
25. **THE RAT**, its History, and Destructive Character. (1s. 6d.)
26. **DOGS**: their Management. By **E. MAYHEW**, M.R.C.V.S. (1s. 6d.)
27. **HINTS** for **FARMERS**. By **R. SCOTT BURN**.
28. **BRITISH BIRDS' EGGS** and **NESTS**. **ATKINSON**.
29. **BRITISH TIMBER TREES**. By **JOHN BLENKARN**. (1s. 6d.)
30. **WILD FLOWERS**. By **SPENCER THOMSON**. (2s.)
31. **LIFE** of a **NAG-HORSE**. With Directions for Breaking and Training Horses, and Hints on Horsemanship. By **FRED. TAYLOR**.
32. **A FIELD FULL** of **WONDERS**.
33. **HAUNTS** of the **WILD FLOWERS**. (1s. 6d.)
34. **SCIENTIFIC FARMING MADE EASY**. (1s. 6d.)
35. **FOOD**, **FREEDING**, and **MANURE**. By **ALFRED SIBSON**.
36. **HORSE-TAMING**, **HORSEMANSHIP**, and **HUNTING**. By **J. S. RAREY** and **SAMUEL SIDNEY**. Illustrated. (1s. 6d.)

LONDON: GEORGE ROUTLEDGE AND SONS.

# BOOKS FOR THE COUNTRY.

WITH NUMEROUS ILLUSTRATIONS.

Price 1s. each.

1. ANC. ING, and Where to Go. By ROBERT BLAKEY.
2. PIGEONS and RABBITS, in their Wild, Domestic, and Captive State  
By H. S. DELAMER. With Illustrations by WEIR.
3. SHOOTING. By BLAKEY. Illustrated by HARRISON WEIR.
4. THE SHEEP: Our Domestic Breeds, and their Treatment. By W. C. L.  
MARTIN. With Illustrations by HARVEY.
5. FLAX and HEMP, their Culture and Manipulation. By E. S. DELAMER.  
With Plates.
6. THE POULTRY YARD; comprising the Management of Fowls. By  
Miss E. WATTS. Illustrated by H. WEIR.
10. THE HORSE. By CREIL and YOUATT. Illustrated by WELLS.
11. BEES: their Habits, Management, Treatment, etc. By Rev. J. G. WOOD.
12. CAGE and SINGING BIRDS. By H. G. ADAMS.
13. SMALL FARMS, and How they ought to be Managed. By M. DOYLE.
14. THE KITCHEN GARDEN. By E. S. DELAMER.
15. THE FLOWER GARDEN. By E. S. DELAMER.
18. THE COMMON OBJECTS OF THE SEA-SHORE. Boards. Illus-  
trated with Coloured Plates.
19. THE COMMON OBJECTS OF THE COUNTRY. Boards. Illus-  
trated with Coloured Plates.
21. WOODLANDS, HEATHS, and HEDGES. By COLEMAN. Boards.
22. BRITISH FER: By THOMAS MOORE, F.L.S. Illustrated. Boards.
23. FAVOURITE FLOWERS: How to Grow them. By A. G. SUTTON.
24. BRITISH BUTTERFLIES. By COLEMAN. 200 Illustrations. Boards.
27. HINTS FOR FARMERS. By D. SCOTT BURN.
28. BRITISH BIRDS' EGGS and NESTS. By Rev. J. C. ATKINSON. Illus-  
trations by W. S. COLEMAN. Boards.
31. LIFE OF A NAG HORSE. By F. TAYLOR. Fcap. 8vo. Boards.
32. A FIELD FULL OF WONDERS. By C. S. CHELTNAM. Illustrated. Bds.
35. FOOD, FEEDING, and MANURE. By ALFRED SIMSON.

Price 1s. 6d. each.

8. CATTLE: their History, and Various Breeds, Management, Treatment,  
and Diseases. By W. C. L. MARTIN. Revised by W. & H. RAYBURN.
20. AGRICULTURAL CHEMISTRY. By SIMSON and VOELCKER.
25. THE RAT. With Anecdotes. By UNCLE JAMES.
26. DOGS: their Management in Health and Disease. By EDWARD MAIL-  
HEW, M.R.C.V.S. With Illustrations.
29. BRITISH TIMBER TREES. By JOHN BLENKARN.
33. HAUNTS OF THE WILD FLOWERS. By ANNE PRATT. Illustrated  
by NOEL HUMPHREYS. Boards.
34. SCIENTIFIC FARMING MADE EASY. By T. C. FLETCHER, Ana-  
lytical Chemist. Fcap. 8vo.
36. HORSE-TAMING, HORSEMANSHIP, and HUNTING. By RAREY  
and SIDNEY.
37. THE PIG: How to Choose, Breed, Rear, Keep, and Cure. By  
WILLIAM YOUATT and SAMUEL SIDNEY.

Price 2s. in boards.

30. WILD FLOWERS: Where to Find and How to Know them. By  
SPENCER THOMSON. Illustrated.

LONDON: GEORGE ROUTLEDGE & SONS.







**THE NEW YORK PUBLIC LIBRARY  
REFERENCE DEPARTMENT**

**This book is under no circumstances to be  
taken from the Building**

MAR 24 1917

for 187 410